**Study Guide for Circles Quiz**

**What is the standard equation of each circle?**

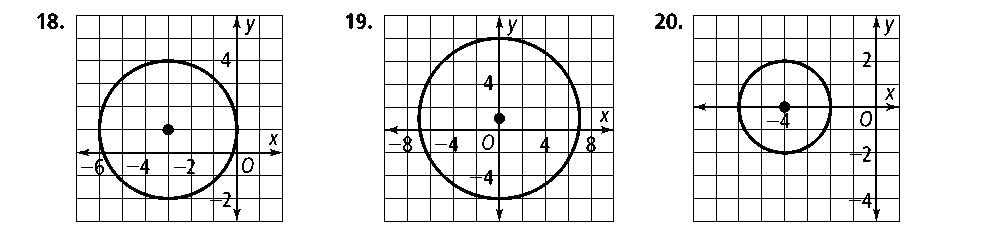
1. center (2, 3); radius = 5
2. center (0, −1); radius = 
3. center (0, −9); *r =* 9
4. center (4, 7); passes through (10, 15)

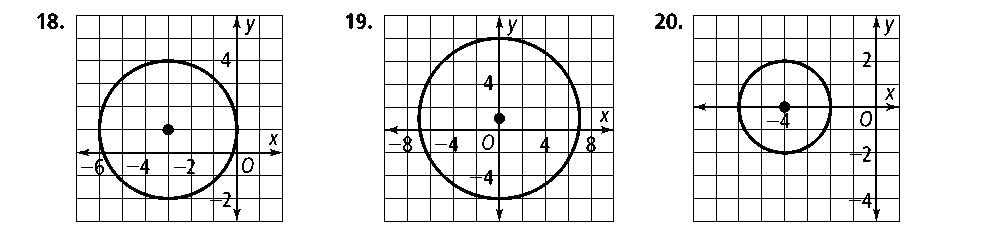
**What is the center and radius of each circle?**

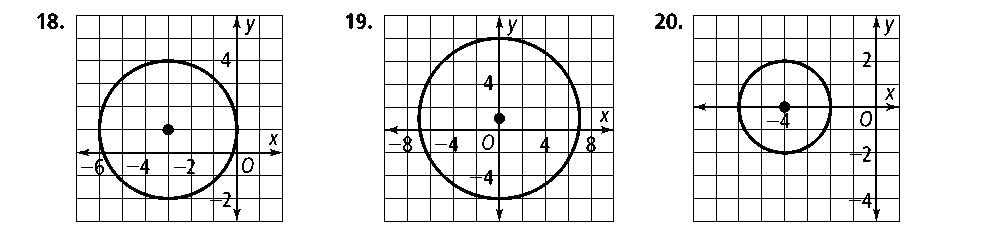
**5.** (*x −* 5)2 + *y*2 = 36 **6.** (*x +* 1)2 + (*y +* 6)2 = 15

**7.** (*x* − 4)2 + (*y* – 3)3 = 16 **8.** (*x* + 7)2 + *y*2 = 10

Write the standard equation for the following circles

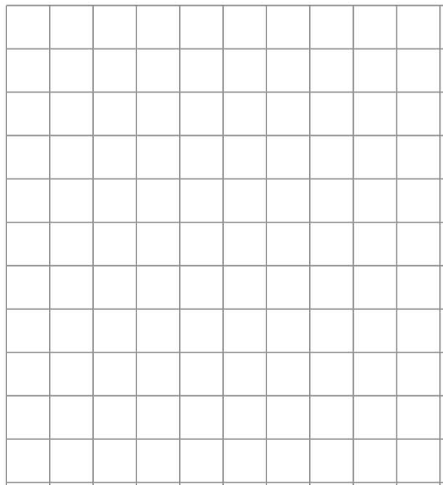
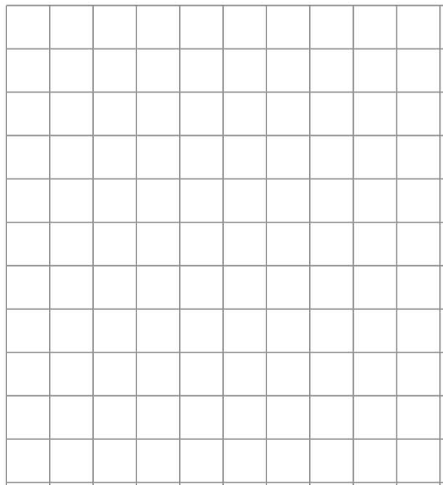
**9.**

**10.**

**11.**

**Find all points of intersection and then sketch the graph.**

**12.** *x*2 + *y*2 = 37

 y = x − 5

**13.**  (x-5)2 + (y-4)2 = 64

(x - 5)2 + (y+4)2 = 128